



Taking Pride in Conservation

Landowners work to
save one of Texas'
last coastal prairies
and its wildlife

by Meagan Racey

Attwater's prairie-chicken. Photo Credit: Noppadol Paothong

When Smithy Welder was a young man, he would ride across his family's ranch, working horses and driving cattle for miles over the wild Texas prairie. Ahead of him, the grasses would wave in the wind—only a few islands of trees and a soaring white-tailed hawk (*Buteo albicaudatus*) separated the flat ground from the endless blue sky.

In the spring, he and his cousins might time their work just right for the prairie show. With the smell of wildflowers rising from the dew, Welder would gaze off towards the sunrise, listening for a chorus of low ghostly calls through the fog: “woo-wo-wo.” If he was lucky, he would settle his eyes on a group

of male Attwater's prairie-chickens (*Tympanuchus cupido attwateri*) performing on their shortgrass mating stage.

With dark feather mohawks at their heads and another fan of feathers at their rear, these small, brown birds seem almost regal. But the most elaborate of their dress are the bright orange air sacs on their necks, complemented by a group of eyebrow-like feathers of the same color. As their sacs inflate, each male sends an almost solemn booming call across a sea of little bluestem. They step quickly—prancing, stomping, and dropping their wings. Nearby females perk up to watch, seeking out the best in show for their partners.

“We used to see them all over the ranch,” says Welder, the fourth generation of six to inherit the family land. “We enjoyed watching them in the mating season as we worked.”

These birds – thought to be the inspiration behind some of the dances performed by the native people of the area – were once abundant, ranging across 6 million acres (2.4 million hectares) of tallgrass prairie along the Texas coast. As this prairie habitat was plowed for farmland and converted for urban development, the species began to decline. By 1993, 450 individuals roamed the prairie, and just 10 years later, only 50 remained.

Today, less than one percent of the Attwater prairie-chicken's home remains, much of it in the Refugio-Goliad Prairie in east Texas. Even this land faces a seemingly insurmountable competitor—invasive brush. Over the past 30 years, Welder has watched the brush overtake miles of prairie.

“We were praying for something like fire to help us,” says Welder. “The brush has been winning the war.”

Federal and state biologists, private landowners like Welder, and conservation organizations recognize the need for concerted efforts to restore, expand, and connect blocks of coastal prairie habitat for endangered birds like the Attwater's prairie-chicken, the whooping crane (*Grus Americana*), and the northern bobwhite (*Colinus virginianus*), as well as other wildlife.

In 1995, the U.S. Fish and Wildlife Service (Service), USDA Natural Resources Conservation Service, Texas Parks and Wildlife Department, The Nature Conservancy (TNC), the Sam Houston Resource Conservation and Development Area (RC&D), and local soil and water conservation districts came together to form the Coastal Prairie Coalition chapter of the Grazing Land Conservation Initiative (GLCI).

Around this time, the Service and RC&D entered into a Safe Harbor Agreement to undertake conservation projects to benefit the Attwater's prairie-chicken, and other rare species including the Houston toad (*Bufo houstonensis*) and Texas prairie dawn-flower (*Hymenoxys texana*). Later, the GLCI joined the cooperative effort by enrolling in a similar agreement with the Service to support recovery for the Attwater's prairie-chicken, the northern aplomado falcon (*Falco femoralis septentrionalis*), and the whooping crane.

“These agreements have really been a catalyst for conserving Attwater's and

other endangered species on private lands,” says Tim Anderson, the field coordinator in the Service's Corpus Christi Ecological Services Field Office. “Here, we have an overwhelmingly privately owned landscape where landholdings are still large enough to affect entire populations of species.”

Together, the team has taken on almost 100,000 acres (40,468 ha) of the Refugio-Goliad Prairie, including more than 17 privately owned ranches. They assist landowners interested in combatting invasive brush through cattle grazing, herbicide spraying, and prescribed burning that mimics wildfires to help maintain a careful balance on the prairie.

“Fire is a very historic and necessary tool, like drought and hurricanes,” says Kirk Feuerbacher, TNC Coastal Prairies Project Director. “The timing of those factors helped the landscape evolve to be a grassland. When it was taken out by people many years ago, everything

changed. We needed to put fire back on the landscape.”

Prescribed burning and compatible grazing practices not only help prevent brush from taking over the prairie, but encourage the growth of native plants while managing the buildup of dead vegetation.

This management comes at a cost, but the ranchers in the area are dedicated to taking back their prairie. By pooling their resources, the team strives to maintain productive agriculture, help native wildlife thrive, and keep the land healthy and in the family. Tim Anderson, a biologist in the Service's Corpus Christi Field Office, estimates that maintaining the remaining 100,000 acres of coastal prairie in a condition that is suitable for the Attwater's prairie-chicken will require about \$665,000 a year—a cost spread among the partners and supplemented with grants.

Smithy Welder, with Clay Neel and Billy Murphy, rides horseback on his family's 25,000-acre Vidauri Ranch in northwestern Refugio County, Texas. Photo Credit: Clifford Carter





The Nature Conservancy conducts a prescribed burn on the Vidauri Ranch. Photo Credit: Wade Harrel

However, according to the species' recovery plan, this 100,000 acres needs to triple in size before it can support the 6,000 Attwater's prairie-chickens necessary to secure the bird's future on the prairie.

There are about 100 Attwater's prairie-chickens occupying the grasslands now—most of them were born and raised in captivity and then released on the Service's Attwater Prairie Chicken National Wildlife Refuge in Eagle Lake, Texas, or on private lands like Welder's ranch.

Loss of suitable habitat is not the only threat to the species. Less than half of the released chicks survive to adulthood—the primary reason being

heavy predation from hawks, coyotes, snakes, and other animals. The invasion of red imported fire ants (*Solenopsis invicta*) also makes survival difficult, having nearly wiped out all of the nutritious insects that are the main food source for the chicks.

In the face of these conservation challenges, this unique team's commitment to conserving Texas' coastal prairies and the wildlife it supports is stronger than ever.

"We've made strides and forged good partnerships," says Stephen Diebel, rancher and chairman with the Coastal Prairie Coalition of GLCI. "I think our relationships will stand the test of time for what we're trying to do."

Years from now, perhaps the next generation of Welders will consider it common to hear the chorus of Attwater's mating calls and catch a glimpse of their unique and inspiring prairie show.

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